

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/004051

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.⁷ A61K31/192, 31/695, 45/00, A61P25/16, 25/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int. Cl.⁷ A61K31/192, 31/695, 45/00, A61P25/16, 25/28

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Caplus (STN), MEDLINE (STN), REGISTRY (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A '	Goodman AB, Pardee AB., 'Evidence for defective retinoid transport and function in late onset Alzheimer's disease.', Proc.Natl.Acad.Sci.USA., 04 March, 2003 (04.03.03), 100(5), pages 2901 to 2905	1-4, 6 5
Y A	Yamakawa T. et al., 'Retinobenzoic acids. 5. Retinoidal activities of compounds having a trimethylsilyl or trimethylgermyl group(s) in human promyelocytic leukemia cells HL-60.', J.Med.Chem., 1990 May, 33(5), pages 1430 to 1437	1-4, 6 5

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
08 June, 2005 (08.06.05)Date of mailing of the international search report
21 June, 2005 (21.06.05)Name and mailing address of the ISA/
Japanese Patent Office

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Etchamendy N. et al., Alleviation of a selective age-related relational memory deficit in mice by pharmacologically induced normalization of brain retinoid signaling., J.Neurosci., 2001 Aug, 21(16), pages 6423 to 6429	1-4
X A	JP 10-338658 A (Hoechst Marion Roussel Ltd.), 22 December, 1998 (22.12.98), Claims; Par. Nos. [0004], [0030], [0133] to [0136] & WO 1998/045242 A1	6 1-5
X Y A	JP 2000-502707 A (Pijon Famashutikaruzu Ltd. Patonashippu), 07 March, 2000 (07.03.00), Claims 5, 20; page 13; table 3 & US 5965606 A	6 1,2 3-5
A	Bourdel-Marchasson I. et al., Antioxidant defences and oxidative stress markers in erythrocytes and plasma from normally nourished elderly Alzheimer patients., Age and Ageing, 2001 May, 30(3), pages 235 to 241	1-6
A	JP 2002-332266 A (Sankyo Co., Ltd.), 22 November, 2002 (22.11.02), Claims & EP 1277729 A1	1-6
A	JP 10-59951 A (Institute of Medicinal Molecular Design Inc.), 03 March, 1998 (03.03.98), Claims; Par. No. [0098] & EP 906907 A1	1-6
A	WO 2002/028810 A2 (F. HOFFMANN-LA ROCHE AG), 11 April, 2002 (11.04.02), Claims; page 137 & JP 2004-510728 A	1-6
A	WO 2002/026727 A2 (ALLERGAN SALES, INC.), 04 April, 2002 (04.04.02), Claims; Par. No. [0003]; table 1 & JP 2004-509955 A	1-6

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1) Claims 1 to 3 relate to drugs for accelerating memory fixation which comprise compounds having an aromatic ring and an aromatic carboxylic acid or a tropolone unit. However, it appears that only a small number of specific compounds described in the description are disclosed as being useful for the purpose in the meaning within PCT Article 5 and, therefore, these claims are not supported in the meaning within PCT Article 6.

2) In particular, the description discloses no particular case where such a compound has a tropolone unit.

3) Claim 3 relates to drugs which contain any compounds having an aromatic ring and an aromatic carboxylic acid or a tropolone unit and having a desired property of being a retinoid binding to RAR subtypes α and β but not binding to γ . However, it appears that only specific compounds described in the description are disclosed in the meaning within PCT Article 5 and, therefore, the claim is not supported in the meaning within PCT Article 6. Even though the common technical knowledge is taken into consideration, it cannot be immediately understood what compounds have the above properties. Thus, it forces to a person skilled in the art to bear a large amount of burden beyond the reasonable extent to confirm whether or not each of an extremely large number of compounds involved in the above compounds has such properties and is efficacious in treating memory fixation failure. Namely, this invention is unclear from this viewpoint.